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- 1. (original) A method for treating a vegetable material with a view to improving the solubility of the non-starch polysaccharides contained in it, characterised in that the material is crushed by using mechanical energy in an amount of 0.15-0.39 kWh/kg to a particle size less than 100 μm , at least a major portion of the cells containing non-starch polysaccharides in the material being damaged during crushing, to produce particles containing non-starch polysaccharides with an improved solubility as the product is contacted with dissolving mediums.
- 2. (original) A method as defined in claim 1, characterised in that at least a major portion of the non-starch polysaccharides contained in the cells end up in particles as produced by the crushing with a particle size smaller than that of the respective initial cell of the non-starch polysaccharide.
- 3. (currently amended) A method as defined in claim 1 or 2, characterised in that the material to be crushed is formed partly or completely of grains of corn, such as oat, rye or barley, or fractions of these.
- 4. (original) A method as defined in claim 3, characterised in that the material is crushed to a particle size less than 50 μ m and most advantageously less than 20 μ m.
- 5. (original) A method as defined in claim 4, characterised in that the material contains aleuron and/or subaleuron layers of grains, which are crushed to a particle size less than 50 μ m, preferably less than 20 μ m.

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- 6. (currently amended) A method as defined in any of the preceding claims, claim 1, characterised in that the method yields improved solubility of β -glucan or pentosan.
- 7. (currently amended) A method as defined in any of the preceding claims, claim 1, characterised in that the material to be crushed contains amylopectin or a material rich in amylopectin, such as waxy rich or waxy barley.
- 8. (original) A method as defined in claim 7, characterised in that the material to be crushed contains amylopectin or a material rich in amylopectin mixed with another biological material containing non-starch polysaccharides, such as oat grains or their fractions.
- 9. (currently amended) A method as defined in any of the preceding claims, claim 1, characterised in that the mechanical energy is generated by the joint effect of heat, pressure and shearing forces.
- 10. (currently amended) A method as defined in any of the preceding claims, claim 1, characterised in that crushing is preformed by extrusion.
- 11. (original) A method as defined in claim 10, characterised in that the material to be crushed is pre-treated to moisture in the range from 6 to 20%.
- 12. (currently amended) A method as defined in $\frac{1}{2}$ and $\frac{1}{2}$ characterised in that the material to be crushed is mixed with a greater amount of liquid medium and the mixture is homogenised under a pressure of 50 to 800 bar.

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- 13. (currently amended) A particulate product obtained by a method defined in any of the preceding claims, claim 1, characterised in that the product contains a vegetable material, which has been crushed to form particles of a size less than 100 µm, in which at least a major portion of the cells containing non-starch polysaccharides in the material has been damaged, the non-starch polysaccharides contained in the crushed particles having enhanced solubility in an aqueous phase with which the product has been brought into contact.
- 14. (currently amended) Use of material treated by a method defined in any of claims 1-12 claim 1 in a food or a fodder, in which the non-starch polysaccharides have improved solubility in the digestive tract.
- 15. (original) Use of the material treated as in claim 7 for controlled viscosity increase.